



GARY R. HERBERT
Governor

GREGORY S. BELL
Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

FILED

APR 15 2010

SECRETARY, BOARD OF
OIL, GAS & MINING

April 15, 2010

TO: The Board of Oil, Gas and Mining

FROM: Gil Hunt, Associate Director, Oil and Gas *GH*
Dustin Doucet, Petroleum Engineer *DD*
Brad Hill, Permitting Manager/Geologist *BH*
Clinton Dworshak, Compliance Manager/Geologist *CD*

RE: Staff Memorandum to the Board for Docket No. 2010-020 Cause No. UIC-362.2 and Docket No. 2010-021 Cause No. UIC-362.1

The Oil and Gas staff of the Division of Oil, Gas and Mining (Division) has reviewed the referenced matter which will be presented to the Board of Oil, Gas and Mining (Board) during the April 28, 2010, hearing. With this memorandum, the Division summarizes its consideration of the matter.

Summary of Requests for Agency Action

Marion Energy (Marion), with legal representation by Matthew L. Crockett and Relma M. Miller of Beatty & Wozniak, P.C. is requesting an order from the Board approving an Aquifer Exemption for waters of the Ferron Member of the Mancos Shale Formation (Ferron) and approval as Class II injection wells, the Alpine School District #3-17 and the Alpine School District #6-17, located in Section 17, Township 13 South, Range 7 East, Carbon County, Utah.

As of the date of this memorandum, one objection has been filed by Carbon County. Telephone conversations with other parties indicate there may be additional written objections prior to the hearing.

Comments from Staff Review of Request

By definition (Rule R649-1-1), any aquifer, which "supplies drinking water for human consumption, or contains less than 10,000 mg/l total dissolved solids (TDS) and is not an exempted aquifer", is an Underground Source of Drinking Water (USDW). Injection into a USDW is not allowed until the aquifer is exempted after hearing and order of the Board, and with concurrence of the U.S. Environmental Protection Agency (EPA).



The wells in this project area are all completed for production in the Ferron Sandstone Member of the Mancos Shale Formation. The proposed injection zone is the same as the producing interval, with the purpose being produced water disposal.

In order for an aquifer to be exempted from classification as a USDW, certain findings must be made in accordance with Rule R649-5-4 as follows (summarized):

1. It must not currently serve as a source of drinking water,
2. It cannot now and will not in the future serve as a source of drinking water for any of the following reasons:
 - a. It contains commercially producible hydrocarbons, minerals or geothermal energy,
 - b. It is at a depth or location, which make recovery of water for drinking water purposes economically or technologically impractical,
 - c. It is contaminated to the extent it would be economically or technologically impractical to render water from the aquifer fit for human consumption,
 - d. It is located above a Class III well solution mining area,
 - e. It has a TDS level between 3,000 and 10,000 mg/l, and is not reasonably expected to be used as a source of fresh or potable water.

Information provided by Marion, as "Exhibit M", indicates that the formation water in the Alpine School District wells were analyzed as 4,776 ppm (mg/l) and 5,562 ppm (mg/l) TDS. Exhibit M for the #3-17 well indicates that the sample was actually taken from the Oman 2-20 well. The water analysis from both Alpine School District wells are in question due to the fact that Marion has been injecting into both wells for several months without Division approval. The analysis submitted for both wells may better indicate the composition of injected water rather than actual formation fluid. Water analysis submitted for a prior UIC application (UIC-361.1), in February of 2010, for the Utah Fuels #8 well, located in Section 19, Township 13 South, Range 7 East, shows a TDS for Ferron water as 12,477 ppm (mg/l). The Board must determine if an Aquifer Exemption is required and if so, if the submitted water analysis is adequate for this purpose.

Page 3

Docket No. 2010-020 Cause No. UIC-362.2, Docket No.2010-021 Cause No. UIC-362.1
April 15, 2010

Marion has stated that they will present evidence that the aquifer to be used for disposal purposes should be exempt as "Underground Storage for Drinking Water" pursuant to Utah Admin. Rule R649-5-4.

Division staff is in the process of evaluating the injection applications and at this time do not feel that the applications are complete and cannot recommend Board approval of the injection applications. The Division is also unable to recommend approval of the injection applications prior to approval of an Aquifer Exemption should it be shown that one is required.

Marion should also discuss the affects of injecting water into the reservoir and future gas production.

Recommendation

Division staff has no definite recommendation regarding the Aquifer Exemption at this time, but may have a recommendation after evidence is presented and after hearing testimony.

Division staff would recommend that the Board not issue an order approving the injection applications, but allow the Division to address the applications administratively.

CERTIFICATE OF SERVICE

I hereby certify that I caused a true and correct copy of the foregoing STAFF MEMORANDUM for Docket No. 2010-020 and 2010-021, Cause No. UIC 362.2 and 362.1 to be mailed with postage prepaid, this 20th day of April, 2010, to the following:

Matthew L. Crockett
Relma M. Miller
Beatty & Wozniak PC
216 Sixteenth Street, Suite 1100
Denver, CO 80202

Keri Clarke, Vice President
Marion Energy Inc.
119 South Tennessee, Suite 200
McKinney, TX 75069

Michael S. Johnson
Megan DePaulis
Assistant Attorneys General
Utah Board of Oil, Gas and Mining
1594 West North Temple, Suite 300
Salt Lake City, UT 84116
[Via Email]

Steven R. Alder
Fred Donaldson
Assistant Attorneys General
Utah Division of Oil, Gas and Mining
1594 West North Temple, Suite 300
Salt Lake City, UT 84116
[Via Email]

Alpine Board of Education
Alpine School District
575 North 100 East
American Fork, UT 84003

Carbon County
125 East Main Street
Price, UT 84501

Carbon County
Recreation & Transportation Special
Service District
120 East Main Street
Price, UT 84501

Becky J Hammond
Bureau of Land Management
Utah State Office
PO Box 45155
Salt Lake City, UT 84145-0155

Don Stephens
Bureau of Land Management
Price Field Office
125 South 600 West
Price, UT 84501

LaVonne Garrison
State of Utah
Trust Lands Administration
675 East 500 South, Suite 500
Salt Lake City, UT 84102

Bruce Suchomel
UIC Program
US EPA Region 8
MS 8P-W-GW
1595 Wynkoop Street
Denver, CO 80202-1129



Jean Sweet